

## **HOW TO USE PIPETTORS -- (\$175)**

1. Dial down for best accuracy
2. Depress to first stop
3. Immerse tip 2 mm
4. Release slowly (never fast!)
5. Withdraw tip
6. Examine tip—if necessary, wipe liquid off edge but don't touch tip
7. Dispense to first stop. Wait 1-2 sec or longer if viscous
8. Dispense to second stop to expel remaining liquid (DON'T release plunger now)
9. Withdraw tip—touching side of vessel
10. Release plunger
11. Discard tip

NOTE: Pre-rinse for protein solutions.

Many plastics bind 1  $\mu\text{g}$  of protein/sq cm.

Never lay pipettor on bench with liquid in tip.

### **How to check the accuracy of your pipettor:**

Distilled water will weigh about 0.998 mg/ul at room temp. Use Analytical Balance to check if your pipettor will correctly deliver this weight of water.

1. Use volumes at low, middle and top of range for pipettor and perform analysis in triplicate.
2. Record your results.
3. Calculate average, standard deviation and the percent deviation of the average from the set value.
4. Tabulate your results and turn into instructor or TA by date requested.